



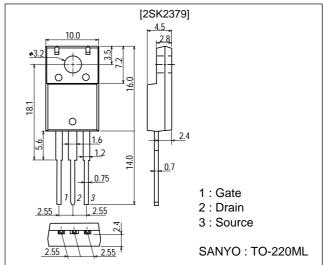
Ultrahigh-Speed Switching Applications

Features

- · Low ON-resistance.
- · Ultrahigh-speed switching.
- · Low-voltage drive.
- · Micalless package facilitaing mounting.

Package Dimensions

unit : mm 2063A



Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	VDSS		200	V
Gate-to-Source Voltage	VGSS		±20	V
Drain Current (DC)	ID		20	Α
Drain Current (Pulse)	IDP	PW≤10μs, duty cycle≤1%	80	Α
Allowable Power Dissipation	D-		2.0	W
	PD	Tc=25°C	40	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		-55 to +150	°C

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Drain-to-Source Breakdown Voltage	V(BR)DSS	ID=1mA, VGS=0	200			V
Gate-to-Source Breakdown Voltage	V(BR)GSS	I _G =±100μA, V _{DS} =0	±20			V
Zero-Gate Voltage Drain Current	IDSS	V _{DS} =200V, V _{GS} =0			100	μΑ
Gate-to-Source Leakage Current	IGSS	V _{GS} =±16V, V _{DS} =0			±10	μΑ
Cutoff Voltage	VGS(off)	V _{DS} =10V, I _D =1mA	1.5		2.5	V
Forward Transfer Admittance	yfs	V _{DS} =10V, I _D =10A	9.5	16		S

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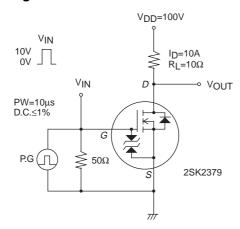
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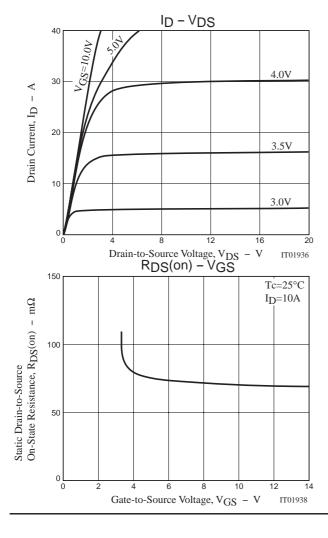
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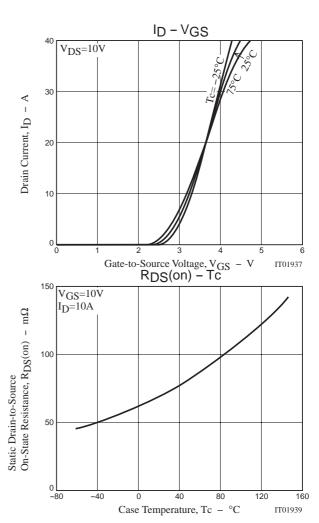
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Static Drain-to-Source On-State Resistance	R _{DS} (on)	I _D =10A, V _{GS} =10V		70	95	mΩ
Input Capacitance	Ciss	V _{DS} =20V, f=1MHz		2400		pF
Output Capacitance	Coss	V _{DS} =20V, f=1MHz		500		pF
Reverse Transfer Capacitance	Crss	V _{DS} =20V, f=1MHz		200		pF
Turn-ON Delay Time	td(on)	See specified Test Circuit		35		ns
Rise Time	tr	See specified Test Circuit		100		ns
Turn-OFF Delay Time	t _d (off)	See specified Test Circuit		710		ns
Fall Time	tf	See specified Test Circuit		290		ns
Diode Forward Voltage	V _{SD}	I _S =20A, V _G S=0		1.0	1.5	V

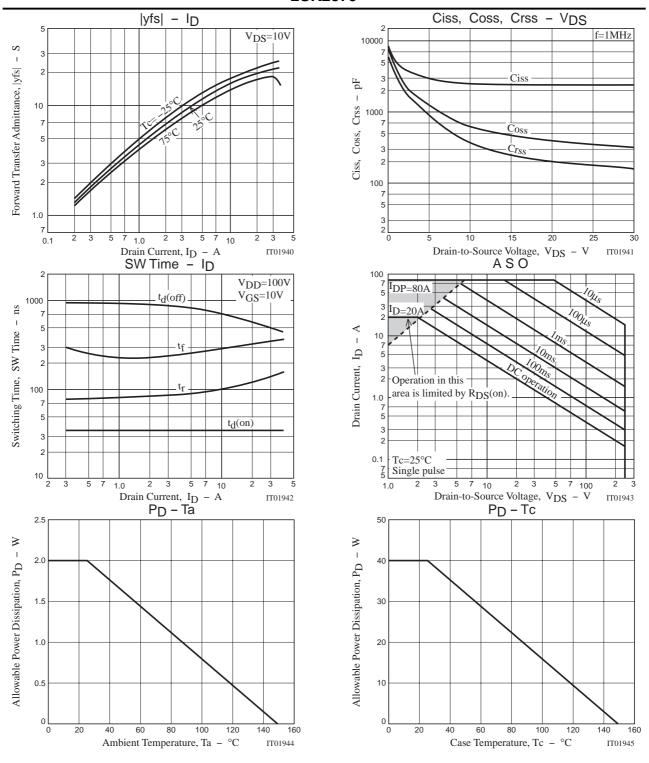
Marking: K2379

Switching Time Test Circuit









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